Arch Chemicals, Inc.

MATERIAL SAFETY DATA

FOR ANY EMERGENCY, CALL 24 HOURS/7 DAYS:	**1-800-654-6911**
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300
FOR ALL MSDS QUESTIONS & REQUESTS, CALL MSDS CONTROL:	1-800-511-MSDS

PRODUCT NAME: HTH® TILE & VINYL CLEANER FOR POOLS

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

REVISION DATE: 03-30-1999 SUPERCEDES: None
MSDS NO: 00003-0009 - 21022

MANUFACTURER: **Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204**

SYNONYMS: None
CHEMICAL FAMILY: Mixture
FORMULA: Not Applicable/Mixture
DESCRIPTION: Cleaning Agent for Pools and Spas
OSHA HAZARD CLASSIFICATION: Skin, eye and respiratory irritant

SECTION 2 COMPONENT DATA

PRODUCT COMPOSITION

CAS or CHEMICAL NAME: Sodium tripolyphosphate
CAS NUMBER: 7758-29-4
PERCENTAGE RANGE: 1-10%
HAZARDOUS PER 29 CFR 1910.1200: Yes
EXPOSURE STANDARDS: None Established

CAS or CHEMICAL NAME: Dipropyleneglycol monomethyl ether
CAS NUMBER: 34590-94-8
PERCENTAGE RANGE: 1-10%
HAZARDOUS PER 29 CFR 1910.1200: Yes
EXPOSURE STANDARDS:

	OSHA(PEL)		ACGIH(TLV)		NIOSH RELs	
	ppm	mg/cubic-meter	ppm	mg/cubic-meter	ppm	mg/cubic-meter
TWA:	100 (skin)		100 (skin)		100	
CEILING:	None		None		None	
STEL:	None		150 (skin)		150	

CAS or CHEMICAL NAME: Oxyalkylated linear alcohol-carboxylic acid, sodium salt
CAS NUMBER: 102900-02-7
PERCENTAGE RANGE: 1-10%
HAZARDOUS PER 29 CFR 1910.1200: Yes
EXPOSURE STANDARDS: None Established

CAS or CHEMICAL NAME: Water
CAS NUMBER: 7732-18-5
PERCENTAGE RANGE: Remainder to 100%
HAZARDOUS PER 29 CFR 1910.1200: No

EXPOSURE STANDARDS: None Established

SECTION 3 PRECAUTIONS FOR SAFE HANDLING AND STORAGE

DO NOT TAKE INTERNALLY. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. UPON CONTACT WITH SKIN OR EYES, WASH OFF WITH WATER.
STORAGE CONDITIONS: Store in a cool, dry area.
DO NOT STORE AT TEMPERATURES ABOVE: 100 Deg.C (212 Deg.F)
OTHER: Keep away from oxidizing agents.
PRODUCT STABILITY AND COMPATIBILITY
SHELF LIFE LIMITATIONS: Approximately 2 years
INCOMPATIBLE MATERIALS FOR PACKAGING: Aluminum containers
INCOMPATIBLE MATERIALS FOR STORAGE OR TRANSPORT: Oxidizers

SECTION 4 PHYSICAL DATA

APPEARANCE: Clear blue, viscous liquid
MELTING POINT: Not Applicable
BOILING POINT: 100 Deg.C (212 Deg.F)
DECOMPOSITION TEMPERATURE: Not Applicable
SPECIFIC GRAVITY: 1.0
BULK DENSITY: Not Applicable
pH @ 25 DEG.C: 8.3
VAPOR PRESSURE @ 25 DEG.C: No Data
SOLUBILITY IN WATER: Miscible
VOLATILES, PERCENT BY VOLUME: >90%
EVAPORATION RATE: No Data
VAPOR DENSITY: No Data
MOLECULAR WEIGHT: Not Applicable/Mixture
ODOR: Slight, ethereal
COEFFICIENT OF OIL/WATER DISTRIBUTION: No Data

SECTION 5 PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

PERSONAL PROTECTION FOR ROUTINE USE OF PRODUCT:
RESPIRATORY PROTECTION: Respirator protection not normally required. If vapors, mists, or aerosols are generated, wear a NIOSH approved respirator.
VENTILATION: Local exhaust ventilation is recommended if vapors, mists or aerosols are generated. Otherwise, use general exhaust ventilation.
SKIN AND EYE PROTECTIVE EQUIPMENT: Use chemical goggles and impermeable gloves.
EQUIPMENT SPECIFICATIONS:
RESPIRATOR TYPE: Not normally required
PROTECTIVE CLOTHING TYPE (This includes: gloves, boots, apron, protective suit): Impervious

SECTION 6 FIRE AND EXPLOSION HAZARD INFORMATION

FLAMMABILITY DATA:
FLAMMABLE: No
COMBUSTIBLE: No
PYROPHORIC: No
FLASH POINT: Not Applicable
AUTOIGNITION TEMPERATURE: Not Applicable
FLAMMABLE LIMITS AT NORMAL ATMOSPHERIC TEMPERATURE AND PRESSURE (PERCENT VOLUME IN AIR): LEL - Not Applicable UEL - Not Applicable

NFPA RATINGS: Not Established

HMIS RATINGS:
Health: 1

Flammability: 0
Reactivity: 0

EXTINGUISHING MEDIA:
Not Applicable-Choose extinguishing media suitable for surrounding materials.

FIRE FIGHTING TECHNIQUES AND COMMENTS:
This product would not be expected to burn unless all the water is boiled away. The remaining organic compounds may be ignitable.
Use water to cool containers exposed to fire.
See Section XI for protective equipment for fire fighting.

SECTION 7 REACTIVITY INFORMATION

CONDITIONS UNDER WHICH THIS PRODUCT MAY BE UNSTABLE:
TEMPERATURES ABOVE: Product is stable at normal temperatures.
MECHANICAL SHOCK OR IMPACT: No
ELECTRICAL (STATIC) DISCHARGE: No
HAZARDOUS POLYMERIZATION: Will Not Occur
INCOMPATIBLE MATERIALS: Oxidizers, aluminum
HAZARDOUS DECOMPOSITION PRODUCTS: Acids, aldehydes, carbon monoxide, carbon dioxide

SUMMARY OF REACTIVITY:
OXIDIZER: No
PYROPHORIC: No
ORGANIC PEROXIDE: No
WATER REACTIVE: No

SECTION 8 FIRST AID

EYES: Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye irritation develops, call a physician.

SKIN: Immediately flush with water for 15 minutes. Wash the contaminated skin with soap and water. If irritation develops, call a physician. If clothing comes in contact with the product, the clothing should be laundered before re-use.

INGESTION: Immediately drink water to dilute. Consult a physician if symptoms develop.

INHALATION: If person experiences nausea, headache or dizziness, person should stop work immediately and move to fresh air until these symptoms disappear. If breathing is difficult, administer oxygen, keep the person warm and at rest. Call a physician. In the event that an individual inhales enough product to lose consciousness, person should be moved to fresh air at once and a physician should be called immediately. If breathing has stopped, artificial respiration should be given immediately. In all cases, ensure adequate ventilation and provide respiratory protection before the person returns to work.

SECTION 9 TOXICOLOGY AND HEALTH INFORMATION

ROUTES OF ABSORPTION
Inhalation, ingestion, skin and eye contact

WARNING STATEMENTS AND WARNING PROPERTIES
DO NOT TAKE INTERNALLY. MAY CAUSE EYE AND MUCOUS MEMBRANE IRRITATION. MAY CAUSE SKIN IRRITATION. MAY CAUSE RESPIRATORY IRRITATION.

HUMAN THRESHOLD RESPONSE DATA
ODOR THRESHOLD: No Data
IRRITATION THRESHOLD: No Data
IMMEDIATELY DANGEROUS TO LIFE OR HEALTH: The IDLH concentration has not been established for this product.

SIGNS, SYMPTOMS, AND EFFECTS OF EXPOSURE

INHALATION
ACUTE:
If inhaled, may cause mild irritation to the throat, mucous membranes, upper respiratory tract, and lungs. Any irritation would be expected to be transient with no permanent damage expected.
CHRONIC:
No effects would be expected except for those listed under acute inhalation exposure.

SKIN
ACUTE:
Skin contact may cause an irritation consisting of transient redness. This irritant effect would not result in permanent damage.
CHRONIC:
There are no known or reported effects from chronic exposure except for effects similar to those experienced from single exposure.

EYE
Contact with the eyes may cause an irritation consisting of reversible redness, swelling and mucous membrane discharge to the conjunctiva. No corneal involvement or visual impairment would be expected.

INGESTION
ACUTE:
Ingestion may cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy or diarrhea.
CHRONIC:
There are no known or reported effects from chronic exposure except for effects similar to those experienced from single exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None known or reported.

INTERACTIONS WITH OTHER CHEMICALS WHICH ENHANCE TOXICITY
None known or reported

ANIMAL TOXICOLOGY
ACUTE TOXICITY:
Inhalation LC 50: No Data
Dermal LD 50: Believed to be > 2 g/kg (rabbit), based on constituents
Oral LD 50: Believed to be > 5 g/kg (rat), based on constituents
Irritation: May cause eye, skin, and respiratory irritation.

ACUTE TARGET ORGAN TOXICITY:
No organs known to be damaged from exposure to this product.

CHRONIC TARGET ORGAN TOXICITY:
There are no known or reported effects from repeated exposure to this product.

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY:
There are no known or reported effects on reproductive function or fetal development.

CARCINOGENICITY:
This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

MUTAGENICITY:
This product is not known or reported to be mutagenic.

The oxyalkylated linear alcohol-carboxylic acid adduct in this product mixture has been tested and produced no clear evidence of mutagenicity in the Ames assay.

AQUATIC TOXICITY:
No data is available on this product. Individual constituents are as follows:

Sodium tripolyphosphate: Toward fish, this material is not strongly toxic, the principal effect being a change in pH value. A mixture of sodium tripolyphosphate and tetrasodium pyrophosphate was tested on rainbow trout. It was found that 560 mg/l as phosphate caused no deaths in 24 hrs. but 1120 mg/l as phosphate killed all the fish. Exposure of green algae for 13.3 hrs at 10 mg/l caused an increase in population growth.

Oxyalkylated linear alcohol-Carboxylic acid adduct:
Rainbow trout (Salmo gairdneri), 96 hr. LC 50: 78-220 mg/l
Bluegill (Lepomis macrochirus), 96 hr. LC 50: 130-220 mg/l
Daphnia magna,48 hr. EC 50: 240 mg/l

SECTION 10 TRANSPORTATION INFORMATION

THIS MATERIAL IS NOT REGULATED AS A DOT HAZARDOUS MATERIAL.

SECTION 11 SPILL AND LEAKAGE PROCEDURES

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC AT 800-424-9300.

REPORTABLE QUANTITY: Not Applicable (Per 40 CFR 302.4)

SPILL MITIGATION PROCEDURES:
Evacuation procedures must be placed into effect. Evacuate all non-essential personnel. Hazardous concentrations in air may be found in local spill area. Utilize emergency response personal protective equipment prior to the start of any response. Stop source of spill as soon as possible and notify appropriate personnel.

AIR RELEASE: Vapors may be suppressed by the use of water fog. Contain all liquid for treatment or neutralization.

WATER RELEASE: This material has the same density as water and is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so. Continue to handle as described in land spill.

LAND SPILL: Create a dike or trench to contain materials. Spill materials may be absorbed using sand, clay or commercial absorbant. Do not place spill materials back in their original containers. Containerize and label all spill materials properly. Decontaminate all clothing and the spill area using soap solution and flush with large amounts of water.

SPILL RESIDUES:
Dispose of per guidelines under Section 12, WASTE DISPOSAL.

PERSONAL PROTECTION FOR EMERGENCY SPILL AND FIRE-FIGHTING SITUATIONS:
No extra protection required beyond that listed in Section 5. In case of fire, use normal fire fighting equipment, including a NIOSH approved. self-contained breathing apparatus (SCBA).

SECTION 12 WASTE DISPOSAL

If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations by treatment in a wastewater treatment system.

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL. THE USER OF THIS MATERIAL HAS THE RESPONSIBILITY TO DIS POSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREAT-MENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

SECTION 13 ADDITIONAL REGULATORY STATUS INFORMATION

TOXIC SUBSTANCES CONTROL ACT:
The components of this product are listed on the Toxic Substances Control Act inventory.

SUPERFUND AMENDMENT AND REAUTHORIZATION ACT TITLE 3:
HAZARD CATEGORIES, PER 40 CFR 370.2:
HEALTH:
Immediate (Acute)
PHYSICAL:
None

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW, PER 40 CFR 355, APP.A:
EXTREME HAZARDOUS SUBSTANCE - THRESHOLD PLANNING QUANTITY:
None Established
SUPPLIER NOTIFICATION REQUIREMENTS, PER 40 CFR 372.45:
None Established

SECTION 14 ADDITIONAL INFORMATION

MSDS REVISION STATUS: Exposure Standards (Section 02), Personal Protective Equipment (Sections 05 & 11), Aquatic Toxicity (Section 09) and References(Section 15) revised

SECTION 15 MAJOR REFERENCES

1. Grant, W. Morton, M.D., Toxicology of the Eye, 2nd Ed., Springfield, IL: Charles C. Thomas, 1974.
2. McKee, Jack, E. and Harold W. Wolf, Eds., Water Quality Criteria, NTIS PB Report; (PB-82-188244), 2nd Ed, Springfield, VA: National Technical Information Services, 1963.
3. Sittig, Marshall, Handbook of Toxic and Hazardous Chemicals and Carcinogens, 2nd Ed., Noyes Publications, Park Ridge, NJ, 1985.
4. Report on Oral LD 50 in Rats, Sodium Tripolyphosphate, Anhydrous. Sperling Laboratories, Arlington, VA, Project #BOM-1, March 1960.

5. Report on Rabbit Eye Irritation, Dipropylene Glycol Monomethyl Ether. MB Research Laboratories, Inc., Spinnerstown, PA, Project #MB77-1821D, August 12, 1977.
6. Report on Acute Dermal Toxicity in Rabbits, Dipropylene Glycol Monomethyl Ether. MB Research Laboratories, Inc., Spinnerstown, PA, Project #MB77-1821B, August 12, 1977.
7. Report on Primary Dermal Irritation in Rabbits, Dipropylene Glycol Monomethyl Ether. MB Research Laboratories, Inc., Spinnerstown, PA, Project #77-1821C, August 12, 1977.
8. Report on Acute Oral LD 50 in Rats, Dipropylene Glycol Monomethyl Ether. MB Research Laboratories, Inc., Spinnerstown, PA, Project #MB77-1821A, August 12, 1977.
9. Report on Rabbit Eye Irritation, Arch Reference #1201D. MB Research Laboratories, Inc., Spinnerstown, PA, Project #MB 84-7389D, December 12, 1984.
10. Report on Acute Dermal Toxicity in Rabbits, Arch Reference #1201B. MB Research Laboratories, Inc., Spinnerstown, PA, 84-7389B, December 12, 1984.
11. Report on Primary Dermal Irritation in Rabbits, Arch Reference #1201C. MB Research Laboratories, Inc., Spinnerstown, PA, Project #MB 84-7389C, December 12, 1984.
12. Report on Acute Oral LD 50 in Rats, Arch Reference #1201A. MB Research Laboratories, Inc., Spinnerstown, PA, Project #MB 84-7389A, December 12, 1984.
13. Salmonella/Microsome Mutagenesis Assay, Arch Reference #1202. Bioassay Systems Corp., Woburn, MA, Project #12114, November 7, 1984.
14. Acute Toxicity to Rainbow Trout (Salmo gairdnerii), Arch Reference #1266A. Springborn Bionomics, Inc. Wareham, MA, Report #BW-85-10-1853, October 1985.
15. Acute Toxicity to Bluegill (Lepomis macrochirus), Arch Reference #1266C. Springborn Bionomics, Inc., Wareham, MA, Report #BW-85-10-1852, October 1985.
38. Acute Toxicity to Daphnids (Daphnia magna), Arch Reference #1266B. Springborn Bionomics, Inc., Wareham, MA, Report #BW-10-1851, October 1985.
39. AQUIRE database (Aquatic Toxicity), Chemical Information System (CIS),Oxford Molecular Group, Hunt Valley, Maryland.

Additional References are available upon request.

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